

4. How to Use E-PROPATH

4.1 How to Use a Single Library FILE

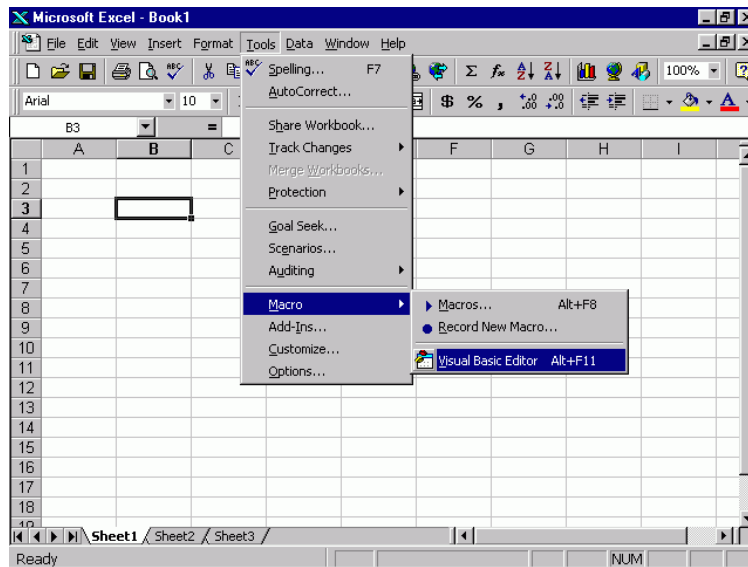
As an example, the procedure to use water Library FILE in MS-Excel are illustrated. The files required are JH2O.DLL and JH2O.BAS. The procedure to use other Library FILE is similar. In the following explanations, the word enclosed with square bracket means the menu item of MS-Excel.

1. Copy JH2O.DLL and JH2O.BAS to the hard disk drive on your computer. The destination directory of JH2O.BAS is a free choice(example: C:\PROPATH\IMPORT), whereas that of JH2O.DLL must be one of following directories;

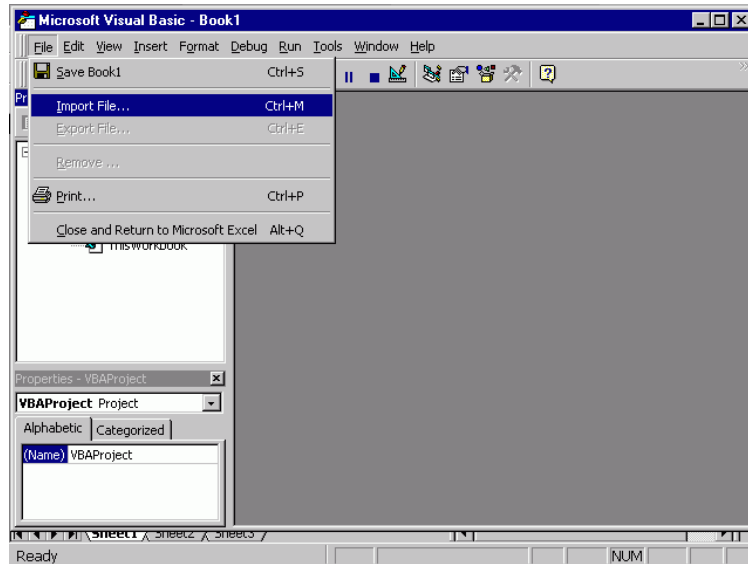
- Windows directory(example: C:\WINDOWS)
- Windows system directory(example: C:\WINDOWS\SYSTEM)
- Directories specified by enviromental variable PATH

Copying Library FILEs to PATH directory is recommended (example: C:\PROPATH\WINLIB), because a conflict of file name may occur in case of copying to Windows directory or Windows system directory.

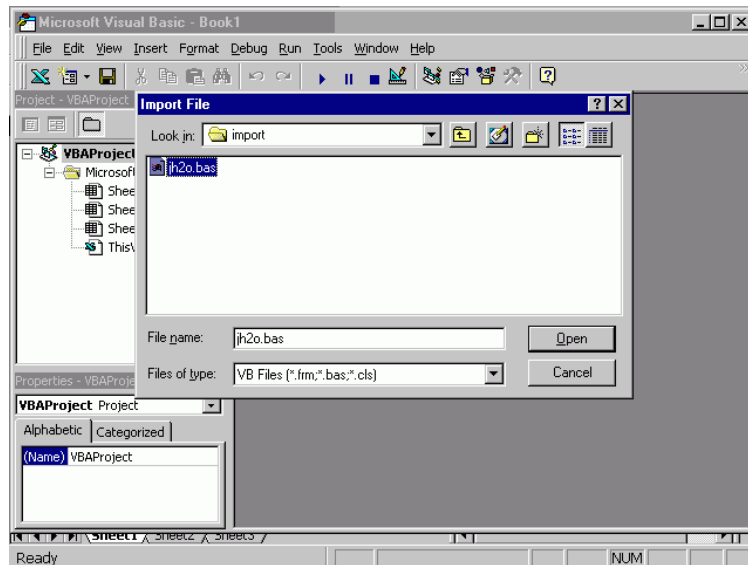
2. Start Microsoft Excel. Select [Tools] - [Macro] - [Visual Basic Editor], then VISUAL BASIC EDITOR starts.



3. On VISUAL BASIC EDITOR, Select [File] - [Import File...].



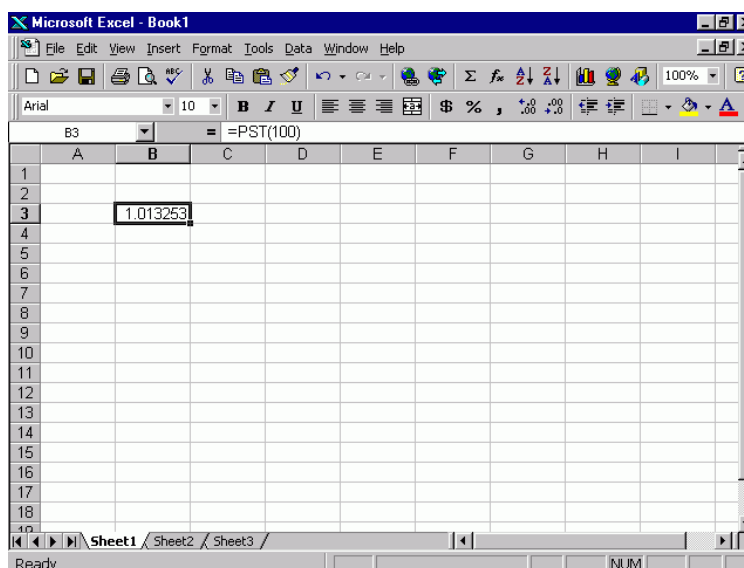
4. Select JH2O.BAS copied to your hard disk drive and press [Open] button.



5. If the "jh2o" module appears in Project Explorer on VISUAL BASIC EDITOR, JH2O.BAS is imported to MS-Excel successfully.

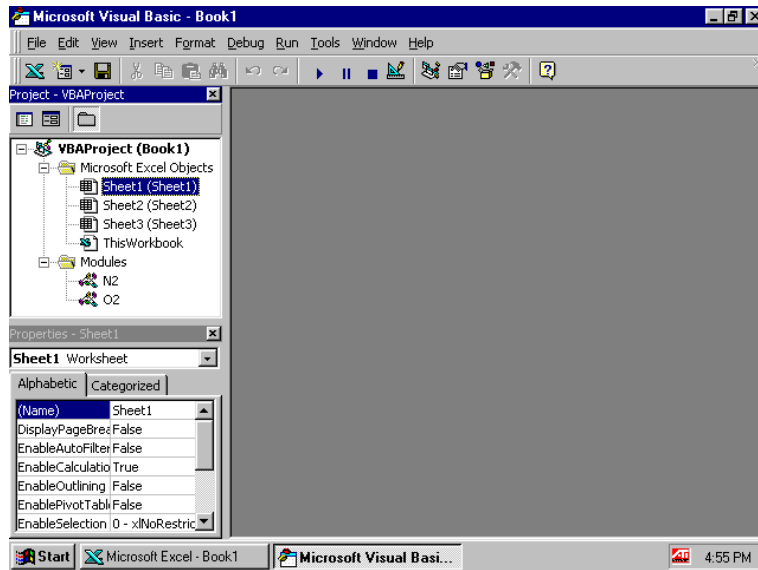


6. On VISUAL BASIC EDITOR, select [File] - [Close and Return to Microsoft Excel] to return MS-Excel. One can call any FUNCTION exported from JH2O.DLL. For example, if one calculates vapor pressure at 100 °C, input "=PST(100)" to any cell on MS-Excel and press the return key. Then the result "1.013253" will be shown in the cell. If "#VALUE!" is shown, make sure that JH2O.DLL exists in the prescribed directories.

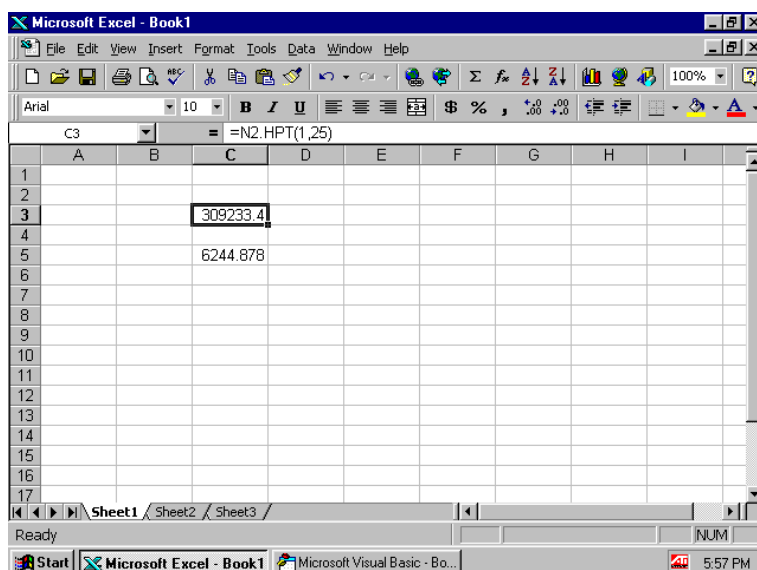


4.2 How to Use More Than Two Library FILES

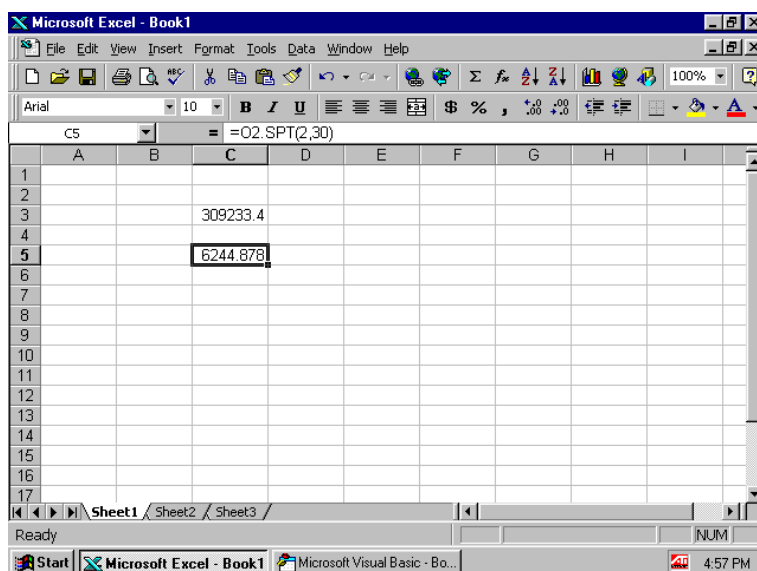
1. One may use more than two Library FILES at the same time. If one use Library FILES of nitrogen and oxgen, the files used are JN2.DLL, JO2.DLL, JN2.BAS, and JO2.BAS. One copies these files to prscribed directory and imports both JN2.BAS and JO2.BAS by the the procedure illustrated at previous section.



2. If one calculates specific enthalpy at 1bar and 25°C of nitrogen, input "=N2.HPT(1,25)".



3. And if one calculates specific entropy at 2bar and 30°C of oxygen, input "=O2.SPT(2,30)".



Thus, in case of importing more than two Library FILES, input "J+(SUBSTANCE NAME).(FUNCTION NAME)".

